

REMARKS

The Examiner has rejected claims 33 and 52 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Applicants have amended claims 33 and 52 providing the appropriate antecedent basis for the term “critical flow venture” in both claims”. Applicants contend that the aforementioned amendments correct the lack of antecedent basis problems for said claims and request reconsideration and withdrawal of the rejections therefrom.

The Examiner has rejected claims 14-24, 27, 24-44, and 46 under 35 USC §103 (a) as being unpatentable over Hendren US Patent Publication 2003/0136177.

Applicants have amended claims 14 and 34 to more positively set forth, that which is regarded as the invention as stated above. Specifically, these claims have been amended by including that the variable mass flow stream is non-collinearly connected with the constant mass flow stream prior to the inlet of the dilution tunnel. The non-collinear connection of a variable mass flow stream and a constant mass flow stream is not taught or suggested in the Hendren reference. The Hendren reference teaches that dilution air is provided by a fixed flow rate pump 29 and the flow therefrom is controlled by a proportional solenoid valve 28. One skilled in the art would readily recognize that the proportional valve 28 creates a backpressure in the line from the fixed flow rate pump 29. This backpressure therefore causes the flow rate out of the pump 29 to be the same as the flow rate coming from proportional valve 28. Thus, what Hendren teaches is one stream of dilution air and that the quantity of dilution air being controlled by the proportional solenoid valve 28 and nothing more. Applicants remind the Examiner that MPEP § 2143 Mandates the three criteria that must be met to provide a prima facie case for obviousness:


“...three basic criteria must be met. First, there must be some motivation, either in the references themselves or in knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings. Second, there must be a reasonable expectation of

success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations.”

Specifically, as now claimed in independent claims 14 and 34 the transient dilution air control arrangement controls dilution airflow by way of a variable mass flow stream that is non-collinearly connected with a constant mass flow stream prior to the inlet of the dilution tunnel. Therefore there is no motivation for controlling the dilution air flow by connecting a constant flow stream with a variable flow stream as is presently claimed in claims 14 and 34. Furthermore, the teachings of the Hendren reference are different from the teachings of the present invention by stating the dilution airflow is controlled in an inverse proportion to the ratio of intake air flow and the engine intake air flow at idle and therefore cannot provide a reasonable expectation of success. Lastly, the Hendren reference does not teach or suggest the features of claims 14 and 34. Applicants therefore contend that claims 15-24 and 27 and claims 35-44 and 46 add additional features to claims 14 and 34 from which they respectively depend, which are believed to be in condition for allowance and respectfully requests reconsideration and withdrawal of the rejection under 35 USC §103 (a) of claims 14-24, 27, 24-44, and 46.

It is respectfully urged that the subject application is in condition for allowance and allowance of the application at issue is respectfully requested.

Respectfully submitted,



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